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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,499	03/15/2004	Robert J. Christ JR.	NORT 63932	9352

7590 06/01/2006

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EXAMINER

TON, TRI T

ART UNIT PAPER NUMBER

2877

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/800,499	Applicant(s) CHRIST ET AL.	
	Examiner Tri T. Ton	Art Unit 2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 61-64 and 67-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/03/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 12/03/04 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Oath/Declaration***

2. The Oath and Declaration filed on 03/15/2004 is acceptable.

### ***Drawings***

3. The drawings filed on 03/15/2004. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 101***

4. Claims 68, 69 and 70 rejected under 35 U.S.C. 101 because the claimed invention is directed to <sup>an</sup>non-statutory subject matter. Claims are directed to neither an "apparatus" nor a "method," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. Id. at 1551.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 68, 69, 70 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 33 and 61 recite method of making a specified product, claims 68, 69 and 70 define an object having a shape to the product set forth in claims 1, 33 and 61 would not be proper dependent claims since they are conceivable that the product claim can be infringed without infringing the base method claim if the product can be made by a method other than that recited in the base method claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 61-64 and 67 are rejected under 35 U.S.C. 102(e) as being taught by Geng (U.S. Patent No. 6,700,669 B1.)

Regarding Claim 61, Geng teaches a method for determining the shape of a three-dimensional object, the method comprising: illuminating at least a portion of a surface of the object with electromagnetic radiation (column 4, lines 59-60), (Figure 11,

elements 1 and 7) comprising a plurality of bands of differentiated characteristics (column 4, lines 60-61), (Figure 11, element 2), wherein each band has a substantially uniform appearance to form a projection (column 4, lines 53-54), (Figure 6b); detecting the projection including the bands of differentiated characteristics (column 2, lines 10-14) (Figure 11, element 4); and determining the shape of the object from the detected projection (column 1, lines 53-56).

Regarding claim 62, Geng teaches the differentiated characteristics of the first bands comprise differentiated wavelengths, and the differentiated characteristics of the second bands comprise differentiated wavelengths (column 6, lines 4-11) (Figures 7a-7c).

Regarding claim 63, Geng teaches each of the plurality of bands are located immediately adjacent one another (Figure 7c).

Regarding claim 64, Geng teaches each of the plurality of bands are generally parallel to one another (column 13, lines 1-4), (Figure 7a).

Regarding Claim 67, Geng teaches an apparatus for determining the shape of a three-dimensional object, comprising: illuminating means for illuminating at least a portion of a surface of the object with electromagnetic radiation (column 4, lines 59-60), (Figure 11, elements 1 and 7) comprising a plurality of bands of differentiated characteristics (column 4, lines 60-61), (Figure 11, element 2), wherein each band has a substantially uniform appearance to form a projection (column 4, lines 53-54), (Figure 6b); detecting means detecting the projection including the bands of differentiated characteristics (column 2, lines 10-14) (Figure 11, element 4); and determining means

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for determining the shape of the object from the detected projection (column 1, lines 53-56).

### ***Allowable Subject Matter***

8. The following is a statement of reasons for the indication of allowable subject matter: No prior art found by the examiner that suggested modification or combination with the cited art so as to satisfy the combination of all the limitations in claims 1, 33, 65 and 66.

9. As to claims 1 and 65, the prior art of record taken along or in combination, fails to disclose or render obvious "the second bands having a different orientation than the first bands".

10. As to claims 33 and 66, the prior art of record taken along or in combination, fails to disclose or render obvious "at least one of the thin bands has a width that is less than the width of at least one of the wide bands".

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references of Geng (U.S. Patent No. 6,700,669 B1) and Di Matteo et al. (U.S. Patent No. 4,511,252) teach of various features similar to the claimed invention.

### ***Fax/Telephone Information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri T. Ton whose telephone number is (571) 272-9064. The examiner can normally be reached on 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



May 19, 2006  
Examiner Tri Ton/SN



Layla Lauchman  
Primary Patent Examiner  
Art Unit 2877  
Technology Center 2800

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